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How do Office Workers Respond to Media Coverage of Sitting?

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Abstract

Background. Sitting time is associated with adverse physical and mental health outcomes, and premature mortality. Office workers sit for prolonged periods, so are at particular risk. Scientific advances in public health threats are predominantly communicated to the public through media reports.

Aims: This study aimed to examine office workers' impromptu responses to media coverage of scientific evidence related to the health risks of sedentary behaviour.

Methods. Semi-structured interviews were run with 26 office workers (mean age 35 years), recruited from four organisations in southern England. Within the interview, each participant provided a 'think-aloud' narrative as they read three real-world news reports relating to sedentary behaviour. Thematic analysis was conducted on verbatim transcripts.

Results. Three themes were extracted from the data: gauging the personal relevance of the news reports; questioning their trustworthiness; and challenging the feasibility of proposed sitting-reduction strategies. Participants voiced scepticism about the applicability of the reports to their personal circumstances, and the validity of the reports and the scientific evidence underpinning them.

Conclusions. Researchers, press officers, and journalists should emphasise the ways in which participants in research studies represent the broader population of office workers, and offer greater transparency in reporting study methods, when reporting scientific advances in sedentary behaviour.

Key words: Sitting, public health, media, news, communication, health risks

Introduction

Sitting is associated with adverse physical and mental health outcomes, including heart disease, depression, and premature mortality, and desk-based office workers are at particular risk [1, 2]. Public acceptability of sitting-reduction initiatives may require awareness of the risks of sitting, but these are relatively unknown among the public [3]. The public typically learns of health risks via the media. Whether health messages will change behaviour may depend on how people interpret them.

Research into public responses to media coverage of sedentary behaviour is scant. A study of online responses to reports of a sitting-reduction expert guidance statement showed that many challenged the guidance and evidence base [3]. Yet, the extent to which website users represent the broader public is questionable. Understanding how office workers interpret news reports could enhance communication of sedentary behaviour science.

Methods

A convenience sample of 26 employees from four organisations (n's = 10, 9, 5, 2) in southern England was interviewed. Participants were adults, spending most of their workday at a desk, and working on-site at least 3 days per week. Twenty-one participants received a £20 voucher, but one organisation forbade incentives. Twenty-one (81%) were female (mean age 35 years, standard deviation 10 years, median 34, range 21-54). Seventeen (65%) were White, seven (27%) Asian or Asian British, one Black, and one of 'Other' ethnicity. Twenty-four (92%) were educated to university level, and two (8%) to GCSE or A-Level (equivalent to US high school).

Participants 'thought aloud' while reading three real-world news reports of sedentary behaviour science, identified via websites of a UK standing-promotion campaign [4] and popular national UK newspapers. Reports were selected to capture research around (a)

prevalence of sitting, (b) *health risks* of sitting, and/or (c) guidance on *reducing* workplace sitting (Table 1). For each of these foci, the report deemed to make the most detailed and discrete points most clearly was selected. Reports were presented to participants in standardised font, omitting author and publisher details.

Interviews opened with broad questions (e.g. *"What does health in the workplace mean to you?"*). Next, participants were instructed to 'say any thoughts that come to mind' as they read each report. The interviewer then asked impromptu follow-up questions, and questions relating to sitting-reduction motivation. Procedures were approved by the King's College London Research Ethics Committee (MR/17/18-124). Verbatim transcripts were thematically analysed [5].

Results

Theme 1: Gauging Personal Relevance. Participants processed content as it pertained to them personally, assessing whether study characteristics reflected their situation. Reports generated realisation of personal risk ("*I'm constantly sitting … that could happen to me*"; Participant 10 [P10]) and, for some, raised awareness of misconceptions ("*[I] thought that exercise combatted [sitting]"*; P4).

Some questioned the representativeness of participants in previous studies (*"a study with 20 Japanese women … that's not really relevant [to me]";* P6). Many felt reports lacked sufficient methodological information for them to gauge relevance ("*I'd be interested to know who the 2000 [participants] are and what their jobs are*"; P5).

Many interpreted information on health risks of sitting and sitting-reduction recommendations in light of their own experiences. For example, several accepted arguments about the difficulty of combatting sitting based on concordant personal examples.

Conversely, some distanced themselves from the 'prototypical' worker described in the reports, as it lacked perceived fit with their own circumstances.

Theme 2: Questioning Trustworthiness. Several participants suggested that research linking sitting to negative health outcomes was motivated by clandestine financial interests. Others felt the reports exaggerated risks ("*[the media is] good at being dramatic*"; P4). Some questioned whether researchers had sufficient experience to offer credible guidance. Others felt statements about the inconclusive nature of existing research undermined the message ("*if [scientists] don't know, then don't talk about it*"; P6).

Many were sceptical of evidence of the health impact of sedentary behaviour ("*I don't even have much faith in the actual specific facts*", P10), and offered apparent counter-examples based on personal experience. Some wanted further information about the conduct of studies, and the mechanisms by which sitting may affect health, to verify assertions ("*I would need more evidence and … to look at the science";* P5).

Theme 3: Challenging the Feasibility of Reducing Sitting. Many believed sitting-reduction recommendations were unfeasible, and advice to sit less yet avoid prolonged static standing was deemed confusing. Seemingly conflicting recommendations were felt to hinder implementation.

Participants generally recognised the need to reduce sitting time, and 'micro-breaks' were deemed acceptable and feasible, though many felt it impractical to stand for four hours. Participants drew on personal experiences to identify barriers to standing, such as social concerns ("*I'd feel a bit silly doing it*", P10), and office working patterns.

Some believed standing desks were essential and agreed with one report that employers should set standing time quotas but expected employers to be unwilling to support such initiatives. Participants believed that employers inappropriately prioritised cost

minimisation over employee health (*"regular spells of activity … increase your productivity"*; P18).

Discussion

This study highlighted office workers' concerns around reports of the health risks of sitting. Many felt the evidence lacked relevance to them. Participants also challenged reporting accuracy, and the validity of scientific evidence. This may reflect deep-rooted mistrust of public health and the news media [3]. Some voiced confusion over the presentation of new findings alongside calls for further research. The lay public often views scientific advances as conclusive [6], rather than as incremental steps in reducing uncertainty.

A limitation of our study is that participants may have paid artificially close attention to the reports. In practice, people spend as little as 30 seconds on news websites [7]. Nonetheless, our study showed that office workers often view news reports of sedentary behaviour science sceptically. Enhancing the acceptability of workplace sitting reduction may depend on office workers' reservations being addressed. When disseminating findings, researchers and journalists should explicitly emphasise commonalities between study participants and other office workers. Scientists, and press and editorial officers, should engage with the media and the public to change perceptions of research and offer greater transparency in reporting study methods.

Key points

What is already known about this subject:

- The public learns of health risks via media coverage of scientific research, but little is known about how office workers respond to news reports of sedentary behaviour science

What this study adds:

- When reading three real-world news reports of sedentary behaviour research, our sample of twenty-six office workers typically expressed scepticism, questioning personal relevance and trustworthiness, and the feasibility of reducing sitting

Impact on policy and practice:

- When disseminating findings to the public, researchers and journalists should be more transparent about study methods and emphasise ways in which study participants represent typical office workers

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Table 1. Description of news reports used to stimulate ‘think-aloud’ responses

Source	*Publication year*	*Focus of report*	*Description of content*	*Length*	*Presentation order*
Daily Mail [8]	2015	Publication of expert consensus sitting-reduction guideline	- UK average daily sitting time - health risks of sitting - expert consensus guidance recommendations - health benefits of reducing sitting and increasing standing and physical activity - interview with Public Health England representative, urging further research into daily workplace activity targets	521 words	First
Daily Mail [9]	2017	Prevalence of sitting	- UK average daily sitting time - health risks of sitting - expert consensus guidance recommendations - interview with healthcare insurance company representative	640 words	Second
Express [10]	2011	Health risks of sitting	- health benefits of reducing sitting - recommendations for strategies to disrupt sitting time (e.g. taking brief ‘micro-breaks’ from sitting)	1071 words	Third